L 16048-66 EWT(m)/EPF(n)-2/EWP(t) IJP(c) JD/JG/GS

ACC NR: AT6005603 SOURCE CODE: UR/0000/64/000/000/0229/0234

AUTHOR: Kharlamov, I. P.; Yakovlev, P. Ya.; Lykova, M. I. 50 B+1

ORG: TsNIIChermet

TITLE: New method of separating niobium 27 from tantalum 27

SOURCE: Vsesoyuznaya konferentsiya rabotnikov metallurgicheskoy i khimicheskoy promyshlennosti i sotrudnikov vuzov. Rostov-on-Don, 1962. Peredovyye metody khimicheskoy tekhnologii i kontrolya proizvodstva (Progressive methods of chemical engineering and production control); trudy konferentsii. Rostov-on-Don, Izd-vo Rostovskogo univ., 1964, 229-234

TOPIC TAGS: niobium, tantalum, quantitative analysis, carbonate

ABSTRACT: A study was made to determine whether niobium and tantalum can be separated by fusing a mixture of their pentoxides with alkali metal carbonates (Na_2CO_3, K_2CO_3, and $KNaCO_3$). The effect of temperature and fusion time, flux composition, method of separation of total metal oxides, and amount of fused metal oxides on the degree of separation of Nb from Ta was investigated. It was found that sodium and

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L 16048-66

ACC NR: AT6005603

potassium carbonates cannot be used as fluxes for the quantitative separation of niobium from tantalum. Potassium sodium carbonate gave promising results: niobium completely fuses together with this salt at 850°C after 5 min, changing into water-soluble potassium hexaniobate, which absorbs strongly in the far ultraviolet; tantalum does not react under these conditions. A satisfactory quantitative separation of Nb from Ta is achieved only when the Nb content of the sample does not exceed 1%. An accurate and reproducible technique based on these findings is proposed for determining Nb and Ta in complex alloys. The determination lasts 7-8 hr, and the relative error is ±4%. Orig. art. has: 4 tables.

SUB CODE: 07/ SUBM DATE: 24Mar64/ ORIG REF: 001/ OTH REF: 000

FW

Card 2/2

YAKOVLEV, P.Ya.; RAZUMOVA, G.P.

Photometric determination of tin by pyrocatechol violet.
Zav. lab. 31 no.11:1307-1308 '65. (MIRA 19:1)

1. TSentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii imeni Bardina.

YAKOVLEV, P.Ya.; SHEMYAKIN, F.M.; KHARLAMOV, I.P.; USHAKOV, V.I.

Reviews and bibliography. Zav. lab. 31 no.11:1422 '65.
(MIRA 19:1)

YAKOVLEV, P. YA.

YAKOVLEV, P. YA. -- "The Ageing of Saltpeter Baths during the Thermal Processing of Steel." Min Higher Education, Gorkiy Polytechnical Institute imeni A. A. Zhdanov, Gorkiy, 1956
(Dissertation for the degree of Candiate in Chemical Science.)

KNIZHNAY LETOPIS
No 41, October 1956

AUTHOR: Yakovlev, P. Ya., Engineer SOV/129-58-10-10/14

TITLE: The Heating Capacity of Saltpetre Baths (Nagrevayushchaya sposobnost' selitrovykh vann)

PERIODICAL: Metallovedeniye i Obrabotka Metallov, 1958, Nr 10, pp 47-50 (USSR)

ABSTRACT: During normal operation of heating baths, the salts have a tendency to age and they become unsuitable for heat treatment if no fresh salts are added.
The author of this paper investigated some saltpetre media which are most frequently used during isothermal and step-wise hardening and also during tempering of steels. For determining the heating properties of molten salts, a mercury thermometer with a scale up to 500°C was used, the end of which was fitted into a steel ball of 33.85 mm dia. By means of this device the heating capacity of saltpetre baths at 400 and 500°C was determined as a function of the degree of ageing, the chemical composition and other factors. For this purpose the ball serving as a thermometer was submerged into the molten media and readings were made every 10 to 15 secs from which, time-temperature and heating speed-temperature

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curves were graphed; simultaneously chemical analyses were made of the saltpetre baths. The test results of saltpetre baths at various stages of ageing, under plant conditions, are graphed in Fig.1. In Fig.2 the influence is graphed of barium nitrate on the heating capacity of an aged bath. In Fig.3 the heating capacity is graphed of fresh saltpetre media and of molten lead. It was found that addition of chlorides (NaCl, KCl, $BaCl_2$, $CaCl_2$) increases the oxidation ability of the saltpetre medium and, therefore, intensifies the ageing process and does not bring about an improvement in the heating properties. Addition of NaOH or KOH to saltpetre mixtures also intensifies their ageing. Sodium nitrate is not recommended for temperatures of 500°C and higher since it dissociates easily and the sodium oxide thus generated causes ageing; thus, addition of sodium nitrite does not improve the heating properties. Admixtures falling into the bath in the form of iron oxides intensify the ageing. Experiments were also made for obtaining information about the rational choice of the composition of saltpetre baths. It can be seen from the results, which are entered in

Table 2, that the difference between the maximum speeds of heating for sodium saltpetre and for the eutectic mixture at 400°C amounts to 0.9-1°C/sec and for the same media the difference at 500°C is only 0.1°C/sec. Thus, at temperatures of 500°C and above any composition of the saltpetre bath is applicable. The following conclusions are arrived at:

1. The heating ability of saltpetre baths depends on the degree of ageing, the older the bath the less is its heating ability.
2. For regeneration of salts of ageing baths it is necessary to add periodically non-aqueous barium nitrate in a quantity depending on the chemical analysis of the bath.
3. The salts NaCl, KCl and the alkalies NaOH and KOH should not be used as additions since they intensify the chemical activity of the saltpetre medium and bring about ageing of the bath.
4. If the saltpetre baths are intended for operation at 450-520°C and above sodium nitrite should not be used as an admixture due to its inadequate stability. If these

baths operate at relatively low temperatures (200 to 300°C) addition of sodium nitrite is advisable.
5. The lower the temperature of the saltpetre medium, the greater the difference between the heating properties of the molten components and their eutectic mixture. Therefore, at low temperatures (200-300°C) the bath should be maintained at exactly the eutectic composition. In the case of operation of saltpetre baths at 350 to 450°C deviations from the eutectic composition are permissible. At 450-520°C and higher it is possible to operate solely with potassium or sodium saltpetre baths or any mixtures of these.
6. For increasing the service life of saltpetre baths with operating temperatures of 450-520°C and above, particularly those containing predominantly sodium saltpetre, it is necessary to clean frequently the silt out of the baths.

The Heating Capacity of Saltpetre Baths SOV/129-58-10-10/14

There are 4 figures, 1 table and 3 references, two of which are Soviet, 1 German.

ASSOCIATION: Gor'kovskiy institut inzhenerov vodnogo transporta (Gor'kiy Institute of Water Transportation Engineers)

1. Salts—Thermodynamic properties 2. Salts—Performance
3. Metals—Heat treatment

Card 5/5

AUTHOR: Yakovlev, P. Ya., Engineer 133-58-4-30/40

TITLE: Ageing of Saltpetre Baths During the Process of the Thermal Treatment of Steel (Stareniye selitrovykh vann v protsesse termicheskoy obrabotki staley)

PERIODICAL: Stal', 1958, Nr 4, pp 364-367 (USSR)

ABSTRACT: The process of ageing of salt baths (consisting of $NaNO_3$ and KNO_3) during thermal treatment of steels, methods of bath regeneration, the role of additions and admixtures and a rational choice of the bath composition were investigated. The experimental results are shown in Tables 1-4. Conclusions: When the bath is operated within a temperature range 300-350°C its composition should be kept near to the eutectic composition in the temperature range 350-450°C deviations from the eutectoidal composition are permissible; at 450-520°C the maintenance of the eutectoidal composition is not necessary. In order to increase the service life of saltpetre baths with an operating temperature 300-520°C and above (particularly when sodium nitrate is the predominant component) a mechanical cleaning of the bath from slurry as well as chemical regeneration in order to

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Ageing of Saltpetre Baths During the Process of the Thermal Treatment of Steel

remove ferrites, perferrites and manganates from the liquid phase by additions of boric acid or potassium bichromate or anhydrous barium nitrate, should be carried out often. Under operating conditions 450-520°C and above additions of sodium nitrite are not advantageous as it decomposes easily, increasing the alkalinity of the medium and, therefore, the rate of ageing of the bath. Under operating conditions of 200-300°C an addition of $NaNO_2$ to the saltpetre mixtures is necessary, as the latter decreases the melting temperature of the medium without undergoing at this temperature a strong decomposition. Chlorides (NaCl, KCl) and alkalies (NaOH, KOH) should not be added to the saltpetre baths used for heat treatment of steel as chlorides and alkalies increase the chemical activity of saltpetre mediums and accelerate the ageing of the baths. Iron oxide admixtures, brought into the saltpetre baths by articles treated, accelerate the ageing process and therefore should be often removed from the bath. There are 4 tables.

Card 2/2

ASSOCIATION: Gor'kovskiy institut inzhenerov vodnogo transporta (Gor'kiy Institute of Engineers of Water Transport)

1. Steel--Heat treatment 2. Heat treatment--Materials 3. Saltpeter--Applications 4. Saltpeter--Properties

18(3)

AUTHOR: Yakovlev, P. Ya.

SOV/163-59-1-45/50

TITLE: Chemical Processes Occurring at Heat Treatment of Steel in Nitrate Baths (Khimicheskiye protsessy, proiskhodyashchiye v selitrovykh vannakh pri termicheskoy obrabotke stali)

PERIODICAL: Nauchnyye doklady vysshey shkoly. Metallurgiya, 1959, Nr 1, pp 233-238 (USSR)

ABSTRACT: In the machine building industry of the USSR nitric baths are more and more used for heat treatment. As, however, the chemical processes occurring during this treatment have hitherto not been known, this investigation was intended to clarify this problem. The author showed that the oxidation process in the nitric bath does not stop at $3Fe + 2O_2 = Fe_3O_4$, and $2Fe_3O_4 + 0.5O_2 = 3Fe_2O_3$, but that it proceeds further and that iron is oxidized to the highest oxygen compounds, it is firstly hepta- and then octavalent. Finally perferrates are formed: $2Na_2FeO_4(2K_2FeO_4) + O_2 = 2Na_2FeO_5(2K_2FeO_5)$. In order to ascertain the processes connected with a protracted stay of the steel products in nitric baths, steel chippings were heated in nitric baths through 1, 2, 3, and 5 hours at 500°. It was found that the weight of the chippings increases and that their color changes to

Card 1/4

a velvety black. If heating is prolonged even further the weight decreases and the color of the chippings changes to a black or dirty rust shade. The longer the chippings are kept in the bath, the more the weight of the chippings will reduce. It was found that if the steel is kept in the nitric bath for a protracted period the steel surface will be corroded. This is explained by the formation of the ferrates and of the perferrates of alkali metals. Reference is made of another paper (Ref 1) and it is stated that the assertion made in that paper which is to the point that the perferrates of the alkali metals exhibit a green color is incorrect. The green coloring is caused by the presence of manganese. The experiments which were carried out in the course of this work and which are briefly described demonstrate that these perferrates are yellow. The reactions for the qualitative determination of manganates and perferrates of sodium and potassium in nitric melts are investigated. It is shown that the "soda-method" for the determination of perferrates can only be used if no manganese and chromium are contained in the melt. The separation of the manganates and of the perferrates of the alkali metals is based upon their different reaction towards hydrogen peroxide. Aqueous solutions of $NaNO_3$ and KNO_3 salts, which

for a long time have been used in the heat treatment of steel and which were neutralized with HCl, after a long rest (20 - 24 hours) again turned basic. According to the author's opinion this can be explained by the following hydrolytic process: $Na_2FeO_5 + H_2O \rightleftharpoons \rightleftharpoons NaHFeO_5 + NaOH$.- It is demonstrated that the nitric medium of the bath, which initially represented a single-or double-component system, turns into a multi-component system after having been used for a heat treatment of steel. The author is of opinion that during a hardening with isothermal transformation the higher oxygen compounds of iron and manganese are destroyed and lower iron and manganese oxides are formed. On this basis the aging process of nitric baths is explained. Practical experience has fully corroborated this theory. The experiments are described and the analyses which substantiate this theory are given. This investigation therefore completely clarified the chemical and physical processes in nitric hardening baths and showed ways and means of using such baths correctly and economically. Besides, methods were found of regenerating such baths. There are 2 tables and 2 Soviet references.

Chemical Processes Occurring at Heat Treatment of Steel in Nitrate Baths SOV/163-59-1-45/50

ASSOCIATION: Gor'kovskiy institut inzhenerov vodnogo transporta (Gor'kiy Institute of Water Transportation Engineers)

SUBMITTED: February 14, 1958

Card 4/4

YAKOVLEV, P.YA

L 17595-65 EWT(d)/EWT(m)/EWP(c)/EWA(d)/EWP(v)/T-2/EWP(t)/EWP(k)/EWP(b)/EWP(l)
ACCESSION NR AM4046730 BOOK EXPLOITATION Pf-4 MJW/JD/ S/
MLK

Samarin, A. M., ed. (Corresponding member, Academy of Sciences, U.S.S.R.) 84

Steel production; handbook (Staleplavil'noye proizvodstvo; spravochnik), t. 2., Moscow, Izd-vo "Metallurgiya", 1964, 1039 p. illus., biblio., tables. Errata slip inserted. 5,850 copies printed.

TOPIC TAGS: steel, open-hearth furnace, quality control, refractory

TABLE OF CONTENTS [abridged]: 16

Part 8. Thermal engineering
Ch. XV. Fuel and its combustion in an open-hearth furnace (N. I. Ivanov) -- 535
Ch. XVI. Mechanics of furnace gases in open-hearth furnaces (G. M. Gl[illegible]ev) -- 554
Ch. XVII. Heat transfer in an open-hearth furnace (S.S. Magidson) -- 575
Ch. XVIII. Thermal operation of an open-hearth furnace (Ye. A. Kapustin) -- 603
Ch. XIX. Auxiliary thermal equipment in steel production (B. G. Turovskiy) -- 617

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L 17595-65
ACCESSION NR AM4046730

Ch. XXXIII. Defectoscopy (V. S. Tokmakov) -- 910
Ch. XXXIV. Use of radioactive isotopes to study the processes of steel production -- 924
Part 11. Design
Ch. XXXV. Design of steelmaking shops (G. A. Garbuz and D. T. Martsinkovskiy) -- 932
Part 12. Economics
Ch. XXXVI. Technical-economic indicators of steel production (G. V. Vitin and A. G. Lifshits) -- 956
Part 13. Transportation, refractories, oxygen, classification and characteristics of steels
Ch. XXXVII. Transportation (S. S. Berlyand) -- 980
Ch. XXXVIII. Refractories (M. A. Lur'ye) -- 993
Ch. XXXIX. Oxygen (D. L. Glizmanenko) -- 1009
Ch. XL. Classification and characteristics of steels (N. V. Matyushina) -- 1020

SUB CODE: MM SUBMITTED: 30May64 NR REF SOV: 279
OTHER: 030

Card 3/3

YAKOVLEV, P.; SHUBIN, A.D., dotsent, nauchnyy rukovoditel'

Automation of production in the logging industry. Sbor. nauch. rab. stud. Petrozav. gos. un. no.6:97-106 '62.
(MIRA 17:11)

1. Kafedra mekhanizatsii lesorazrabotok Petrozavodskogo gosudarstvennogo universiteta.

YAKOVLEV, R. A.

PA 16/49T28

USSR/Electricity Jul 48
Transformers, Regulating
Circuits, Lighting

"Automatic Regulating Transformer for Lighting Circuits," R. A. Yakovlev, Engr, Peat Enterprises at Tugoless Bor, 5 pp

"Torf Prom" No 7

Voltage fluctuations are common in peat enterprise electric circuits. Excess voltage shortens bulb life and low voltage results in inadequate lighting. Describes autotransformer for maintaining constant voltage.

16/49T28

YAKOVLEV, R. G.

PHASE I BOOK EXPLOITATION SOV/3803

Zvyagil'skiy, Leonid Yakovlevich, and Radomir Gerontevich Yakovlev

Pnevmaticheskiye patrony k tokarnym stankam. Bestsangovyy pnevmaticheskiy patron k revol'vernym stankam. Bestsangovyy patron s avtomaticheskoy podachey materiala k revol'vernym stankam (Pneumatic Chucks for Lathes. Pneumatic Chuck Without Collet for Turret Lathes. Chuck Without Collet With Automatic Feed of Work for Turret Lathes) Leningrad, 1959. 17 p. 6,500 copies printed. (Series: Obmen peredovym opytom. Seriya: Mekhanicheskaya obrabotka metallov, vyp. 9)

Sponsoring Agencies: Obshchestvo po rasprostraneniyu politicheskikh i nauchnykh znaniy RSFSR; Leningradskiy dom nauchno-tekhnicheskoy propagandy.

Ed.: P.A. Semenenko, Engineer; Tech. Ed.: M.M. Kubneva.

PURPOSE: This booklet is intended for tool designers, production engineers, and students of machine and tool design.

Card 1/2

Pneumatic Chucks (Cont.)

SOV/3803

COVERAGE: A description is given of new designs of pneumatic chucking devices without collet. These new pneumatic chucks are the self-locking type, easy to mount on existing lathes, and said to be superior to the three-jaw pneumatic chucks now used. The text contains numerous detailed drawings of the new chucking devices accompanied by a description of operating characteristics. Schematic diagrams of the pneumatic circuits for the actuation of the chucking devices are also presented. No personalities are mentioned. There are 4 Soviet references.

TABLE OF CONTENTS: None given.

AVAILABLE: Library of Congress

Card 2/2

VK/jb
6-17-60

86887
S/056/60/039/005/001/051
B029/B079

24.6900

AUTHORS: Zhdanov, A. P., Kuks, I. M., Skirda, N. V., Yakovlev, R.M.

TITLE: Multiple Production of Particles in the Interaction Between Nucleons of Energies $>10^{11}$ ev and Emulsion Nuclei

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1960, Vol. 39, No. 5(11), pp. 1177 - 1185

TEXT: The authors analyzed 80 events of meson production observed in an emulsion chamber consisting of 180 layers of НИКФИ-Р (NIKFI-R) emulsions (area, 10·10 cm^2; thickness, 400 μ). This chamber was irradiated for 9 hours at an altitude of 24 km. 120 nuclear interactions with more than five relativistic particles were found. In each of these stars, the number of thin (N_s), gray (N_g), and black (N_h) tracks was counted, and by means of a goniometer the angle $\theta_{1/2}$ was estimated, which included half the amount of relativistic particles. The grains in the tracks were counted by means of microscopes of the types МБИ-8 (MBI-8),

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S/056/60/039/005/001/051
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Multiple Production of Particles in the Interaction Between Nucleons of Energies $> 10^{11}$ ev and Emulsion Nuclei

МБИ-8М (MBI-8M), and Кук 4005 (Kuk 4005). The number l of nucleons of the target nucleus, which were involved in meson production, was calculated from the formulas $N_s = (21)^{1/4}(l + 1)\gamma_c^{1/2}$ and $\gamma_c = \left[1-(v_c/c)^2\right]^{-1/2}$ which are valid in Landau's hydrodynamic theory; v_c denotes the velocity of the center-of-mass system of the primary nucleon and of the nucleons of the nucleus. The correlation coefficient is $r = -0.33 \pm 0.18$. These results may be explained as follows: At energies of $10^{11} \div 10^{12}$ ev, the factor γ_c is small, and considerable part of the energy of the primary nucleon may be transferred to the nucleus which is located behind the cylindrical tube. When the energy of the primary nucleon is increased, two processes will compete in meson production: The average multiplicity per nucleon increases, and the number of excited nucleons of the target nucleus decreases. For energies of up to 10^{12} ev the second effect is stronger. The anisotropy in the angular distribution of the shower

Multiple Production of Particles in the Interaction Between Nucleons of Energies $>10^{11}$ ev and Emulsion Nuclei

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particles may be described by $\eta_i = \log \tan \Theta_i$. For constant energies of the primary particle, the anisotropy of nucleon-nucleon showers and showers caused by central collisions of a primary nucleon with a heavy nucleus differ largely. D. S. Chernavskiy (Ref.7) has given a hypothesis concerning the existence of a special type of inhomogeneities in nucleon-nucleon collisions. The present paper leads to the following conclusions: 1) When studying interactions of high-energy nucleons (up to 10^{12} ev) with heavy nuclei, one must take into account the expansions of the nuclear matter tube when striking this matter out of the nucleus. 2) The anisotropy in the angular distribution of nucleon-nuclear showers does not decrease with increasing number of excited nucleons. This holds, at least, for energies of up to $5 \cdot 10^{12}$ ev. 3) In this energy range, the relative probability of accompanying showers as predicted by Chernavskiy does not exceed 0.04. The "accompanying tube" must not be investigated independently of the principal one. 4) The angular distributions of relativistic particles in the showers are homogeneous and can be

Multiple Production of Particles in the Interaction Between Nucleons of Energies $>10^{11}$ ev and Emulsion Nuclei

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exactly described by Gauss functions in the variables $\varkappa = \log \tan \theta$.
The authors thank A. A. Blyudzin, D. M. Samoylovich, A. N. Charakhch'yan, V. P. Grigor'yev, Ye. L. Feynberg, and G. A. Milekhin for assistance and discussions. There are 8 references: 5 Soviet, 1 Dutch, and 1 Italian.

ASSOCIATION: Radiyevyy institut Akademii nauk SSSR (Radium Institute of the Academy of Sciences USSR)

SUBMITTED: April 6, 1960

S/058/61/000/010/012/100
A001/A101

3.2410

AUTHORS: Zhdanov, A.P., Kuks, I.M., Skirda, N.V., Yakovlev, R.M.

TITLE: On the form of angular distribution of shower particles in jets of nucleon - nuclear origin

PERIODICAL: Referativnyy zhurnal, Fizika, no. 10, 1961, 95-96, abstract 10B493 ("Tr. Mezhdunar. konferentsii po kosmich. lucham, 1959, v. 1", Moscow, AN SSSR, 1960, 87 - 92)

TEXT: The authors present preliminary results of investigating distributions of shower particles over polar and azimuth angles. The study of 65 jets generated in interactions of high-energy ($E_0 = 10^{10} - 10^{13}$ ev) single-charged particles with nuclei of the emulsion has shown that: 1) Angular distributions of shower particles of these jets possess azimuthal symmetry; they are symmetrical relative to angle $\pi/2$ in the center-of-mass system; 2) Multiplicity of anomalous jets can be apparently easily explained from the viewpoint of a single meson production, without resorting to the concept of intranuclear cascade.

[Abstracter's note: Complete translation]

L. Dorman

Card 1/1

KUZ'MIN, V. N.; YAKOVLEV, R. M.; YAKOVLEV, Yu. P.

"Investigations of $He^4(p,nn,x\pi)He^3$ Reactions with 660 MeV Protons."

report submitted for All-Union Conf on Nuclear Spectroscopy, Tbilisi, 14-22 Feb 64.

Radium Inst.

ZHDANOV, A. P.; KUZ'MIN, B. N.; YAKOVLEV, R. M.

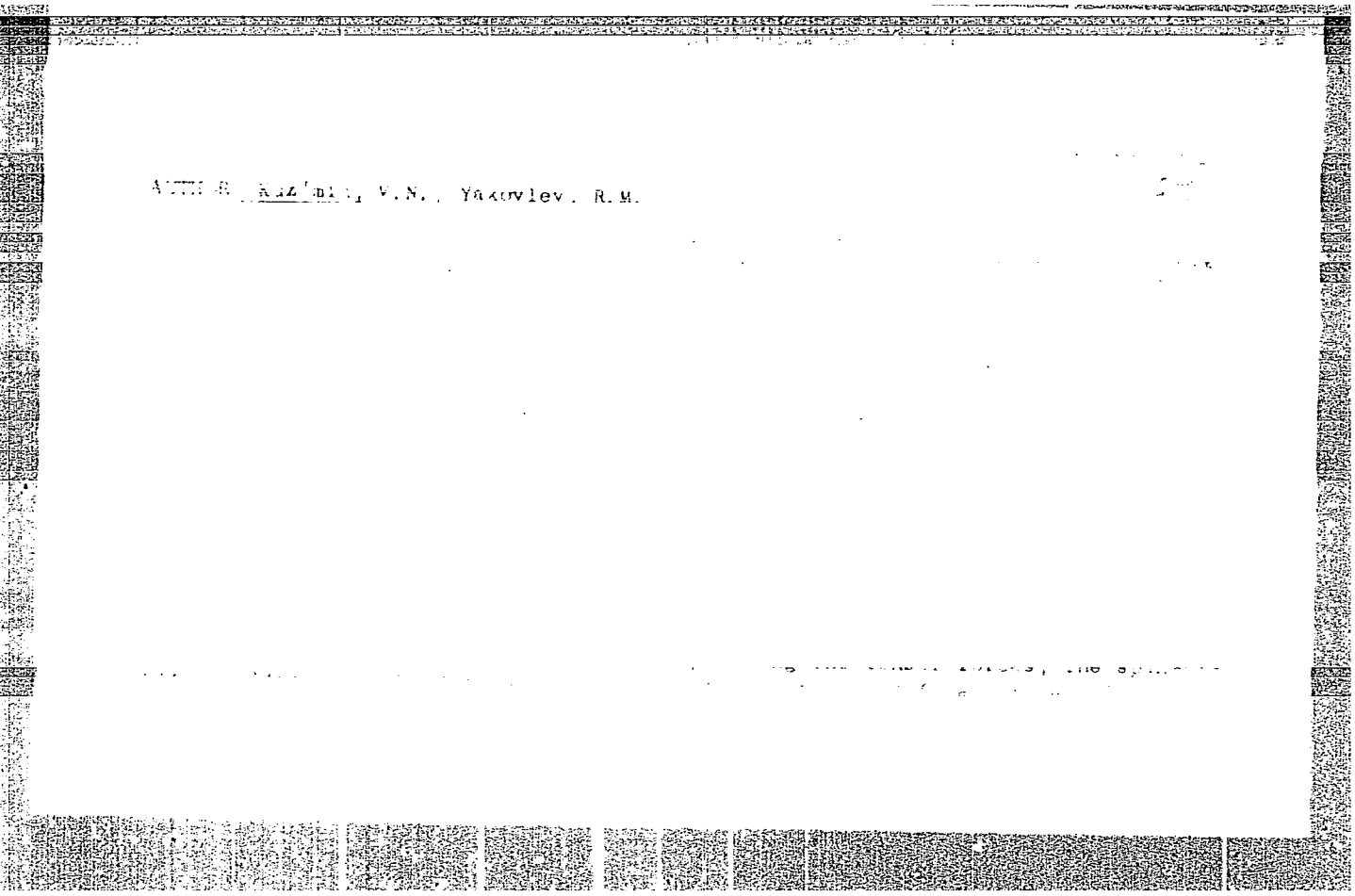
"Knock-out of Alpha Particles from Nuclei if Li, N, and O, by Protons with 660 MeV Energy."

report submitted for All-Union Conf on Nuclear Spectroscopy, Tbilisi, 14-22 Feb 64.

Radium Inst.

ZHDANOV, A.P.; KUZ'MIN, V.N.; YAKOVLEV, R.M.

Knocking out alpha particles from Be nuclei by 660 Mev. protons.
IAd. fiz. 1 no.4:625-628 Ap '65. (MIRA 18:5)



[illegible] with momenta of the order of 1000 MeV/c. [illegible]

Card 2/2

L 33625-65

KUZ'MIN, V.N.; YAKOVLEV, R.M.

Knocking out alpha particles from carbon nuclei. Izv. AN SSSR. Ser. fiz. 29. no.7:1237-1241 Jl '65.

Elastic scattering of 660 Mev. protons by He_2^3 and He_2^4 nuclei. Ibid.:1242-1247 (MIRA 18:7)

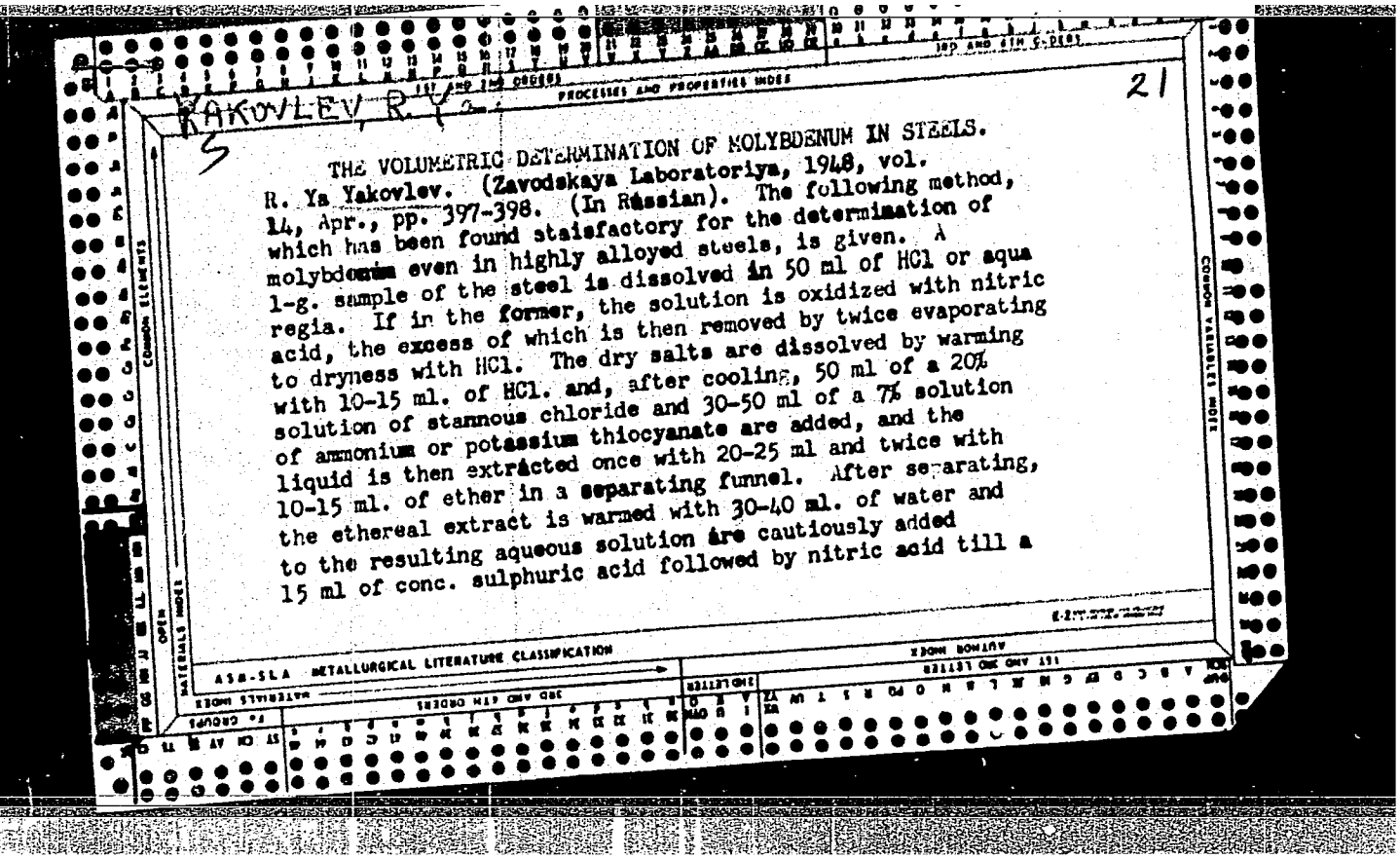
KUZ'MIN, V.N.; YAKOVLEV, B.M.

Study of the reactions $p+Li^7 \rightarrow \pi^- + A^8$ and $p+Li^7 \rightarrow \alpha + \alpha$ involving 660 Mev. protons. Izv. fiz. 2 no.4:687-690 O '65. (MIRA 18:11)

Yakovlev, R.N.

YAKOVLEV, R.N.

The operation of 18D engines. Rech.transp. 14 no.8:26-27 Ag'55.
(Marine) (MLRA 8:11)



PROCESSES AND PROPERTIES INDEX

21

YAKOVLEV, R. Ya.

S

THE VOLUMETRIC DETERMINATION OF MOLYBDENUM IN STEELS.

R. Ya Yakovlev. (Zavodskaya Laboratoriya, 1948, vol. 14, Apr., pp. 397-398. (In Russian). The following method, which has been found satisfactory for the determination of molybdenum even in highly alloyed steels, is given. A 1-g. sample of the steel is dissolved in 50 ml of HCl or aqua regia. If in the former, the solution is oxidized with nitric acid, the excess of which is then removed by twice evaporating to dryness with HCl. The dry salts are dissolved by warming with 10-15 ml. of HCl. and, after cooling, 50 ml of a 20% solution of stannous chloride and 30-50 ml of a 7% solution of ammonium or potassium thiocyanate are added, and the liquid is then extracted once with 20-25 ml and twice with 10-15 ml. of ether in a separating funnel. After separating, the ethereal extract is warmed with 30-40 ml. of water and to the resulting aqueous solution are cautiously added 15 ml of conc. sulphuric acid followed by nitric acid till a

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

clear liquid is obtained. This solution is then evaporated till fumes of sulphur trioxide appear, and, if the liquid is not clear, the evaporation is repeated with 5-10 ml of HNO_3. The cooled liquid, diluted to 50 ml with water, is reduced with liquid zinc amalgam and titrated with permanganate under carbon dioxide.

S.K.

USSR/Metals - Surface Protection, Plating Nov 51

"Porous Chrome Plating," S. Yakovlev

"Nauka i Zhizn'" Vol XVIII, No 11, pp 45,46

Discusses property of porous chrome deposition to increase resistance to wear of machine parts subject to friction. Porosity is attained by connecting plated articles into electrolysis circuit as anode for several min. Pores increase wettability of chromium. Lubricants, retained in pores, provide for normal operation even in case of insufficient lubrication. Porous plating of automobile engine parts increase their wear-resistance 6 times. Expts established that holding of chrome plated samples of steel at 400-450° for 2-3 hrs brings fatigue limit to a value higher than that of same steel before plating.

213T104

YAKOVLEV, S.

213T104

YAKOVLEV, S.

Vinyl Plastic

Vinyl plastic. Nauka i zhizn' 19
No. 8, 1952.

Monthly List of Russian Accessions, Library of Congress, November 1952. UNCLASSIFIED.

1. YAKOVLEV, S.

2. USSR (600)

4. Plywood

7. Plywood pipes. Nauka i zhizn' 20 No. 3, 1953.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

YAKOVLEV, S.

Electromagnetic punching machinery. Nauka i zhizn' 23 no.6: 52 Je '56. (MLRA 9:9)

(Power presses) (Electromagnets)

YAKOVLEV, S.

Multi-purpose electric tool. Nauka i zhizn' 20 no.11:16 N '53.
(MLRA 6:11)
(Electric machinery)

YAKOVLEV, S. (Leningrad)

Electrohydraulic tools. Nauka i zhizn' 23 no.1:48-49 Ja '56.
(Electric discharges) (Hydraulic machinery) (MLRA 9:4)

YAKovlev, S.

USSR/ Engineering - Air conditioning

Card 1/1 Pub. 77 - 14/23

Authors : Yakovlev, S.

Title : Cooling device in the shop

Periodical : Nauka i Zhizn' 21/10, page 31, Oct 1954

Abstract : A description is given of an apparatus for factories which draws in outside air, cleans, dries and cools or warms it as need be, its operation being controlled by a thermostat to maintain the desired temperature. Illustration.

Institution : ...

Submitted : ...

1. YAKOVLEV, S.

2. USSR (600)

4. Architecture

7. Craftsmanship of the architect. Arkhit. SSSR No. 5, 1953.

9. Monthly List of Russian Accessions, Library of Congress, April 1953. Unclassified.

YAKOVLEV, S. (Tambov)

Extra help. Prom.koop. 13 no.12:34 D '59. (MIRA 13:4)
(Salvage (waste, etc.))

YAKOVLEV, S.

USSR/Chemistry - Removal of Furnace Scale Apr 52

"PKhK (Antiscale Chemical Composition)," S. Yakovlev

"Nauka i Zhizn'" No 4, pp 38-41

Mentions the prepn "Antinakipin" used for the prevention of scale formation in boilers and describes the use of PKhK, which was developed by M. M. Mart'yanov, Engr of the Leningrad RR, for the prevention of deposit formation in fire tubes of locomotives, on the walls and tubes of steamship boilers, etc. PKhK consists mainly of sodium chloride, which volatilizes and decomposes due to the heat of the furnace; 150-250 g of PKhK are added per ton of fuel.

221T16

1. YAKOVLEV, S. (M) VASIL'EV, O.

2. USSR (600)

4. Fruit Culture

7. In the footsteps of a countryman. Smena. 29, no. 22, 1952.

9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.

YAKOVLEV, S. [illegible]

USSR/Agriculture - Soil treatment Jul 52

"Cementation of Sands," S. Yakovlev

"Nauka i Zhizn'" Vol 19, No 7, p 24

PA 244T4

Sandy soils can be stabilized against the action of wind by treating the surface with a bituminous emulsion sprayed from air planes or from appliances moving over the surface. Stabilizing of soils is particularly useful in connection with the planting of crops and forest shelter in steppes and construction work in steppes and deserts. It has been applied in the Kara-Kum and Lower Dnepr regions and will be

244T4

applied along the course of the Main Turkmen Canal. Work on the subject has been done by the Agrophysical Institute of VASKhNIL. Sands treated in this manner contain bitumen in a surface layer 8-10 mm thick and resist winds having velocities of up to 9 meters per sec.

244T4

YAKOVLEV, S. [illegible]

Coarse grains. Nauka i zhizn' 20 no.12:32 D '53. (MLRA 6:12)
(Fertilizers and manures)

YAKOVLEV, S. A.

M-6

USSR/Cultivated Plants - Fruits. Berries.

Abs Jour : Ref Zhur - Biol., No 20, 1958, 91787

Author : Yakovlev, S.A.

Inst : AS USSR

Title : Water Consumption of a Fruit Orchard.

Orig Pub : V sb.: Biol. osnovy oroshayem. zemled. M. AN SSSR, 1957, 377-384.

Abstract : This article characterizes water consumption at the Kamenskoye-Dneprovsk Experimental and Amelioration Station's irrigated apple orchard situated on the left bank terrace of the Dnepr river. The soils were ordinary slightly humus and slightly clayey chernozem (2-2.5% humus) with the humus layer 50-55 cm thick. The level of subsurface water was 8-10 meters. The field moisture capacity of the soil and subsoil in a layer of 2 meters was 17.8%, the wilting

Card 1/2

AUTHORS: Solopko, A.A., Yakovlev, S.A. SOV/21-58-2-28/28

TITLE: Determining the Moisture Discharge From an Orchard Surface by the Vertical Gradient of Evaporation (Uchët raskhoda vlagi sadom po vertikal'nomu gradiyentu isparyayemosti)

PERIODICAL: Dopovidi Akademii nauk Ukrains'koi RSR, 1958, Nr 2, pp 230-233 (USSR)

ABSTRACT: The authors present the results of a comparative study of two methods of determining the actual evaporation from the surface of an orchard of the Kamensko-Dneprovskaya Experimental Station. The first is the balance method based on a determination of soil moisture by boring, a calculation of the moisture stores and precipitations. The second is the gradient method developed by A.A. Solopko and already tested in practice by the Institut lesa (Forestry Institute) of the AS UkrSSR at the Starosel'skaya Biological Station. This method is based on the evaluation of the vertical evaporation difference determined by means of evaporators designed by A.A. Solopko. Comparing the results of both of these methods the authors draw the conclusion that the evaporation data obtained by the gradient method are more precise and reliable not only over the entire period but also for separate inter-

Card 1/2

Determining the Moisture Discharge From an Orchard Surface by the Vertical Gradient of Evaporation

vals of time.
There are: 1 table, 1 diagram, and 2 Soviet references.

ASSOCIATION: Ukrainskiy nauchno-issledovatel'skiy institut gidrotekhniki i melioratsii (Ukrainian Scientific Research Institute of Hydraulic Engineering and Melioration)

PRESENTED: By Member of the AS UkrSSR, P.S. Pogrebnyak

SUBMITTED: April 19, 1957

NOTE: Russian title and Russian names of individuals and institutions appearing in this article have been used in the transliteration.

L 8854-66 EWT(d)/EWT(m)/EWP(v)/EWP(t)/EWP(k)/EWP(h)/EWP(b)/EWP(l)/EWA(c) JD/HW

ACC NR: AP5026483 SOURCE CODE: UR/0286/65/000/019/0009/0009

INVENTOR: Granovskiy, S. P.; Pyatunin, A. I.; Yefanov, V. I.; Yakovlev, S. A.; Arutyunov, I. G.; Revunov, V. A.; Zemskov, A. A.; Shofman, L. A.

ORG: none

TITLE: Production of seamless tubes. Class 7, No. 175026. [Announced by All-Union Scientific Research and Design-Planning Institute of Metallurgical Equipment (Vsesoyuznyy nauchno-issledovatel'skiy i proyektno-konstruktorskiy institut metallurgicheskogo mashinostroyeniya)]

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 19, 1965, 9

TOPIC TAGS: tube, seamless tube, thin wall tube, light alloy tube, metal rolling

ABSTRACT: This Author Certificate introduces a method for making seamless tubes, e.g., light-alloy tubes from rolled, forged, or cast tube shells. To obtain thin-wall tubes of large diameter with precise dimensions and a clean surface, the tube shell is first hot rolled with expansion in a helical mill and then cold rolled with elongation in a helical rolling mill. [AZ]

SUB CODE: 13/ SUBM DATE: 12Feb64/ ATD PRESS: 4152

BYK

Card 1/1 UDC: 621.774.3

37811
S/120/62/000/002/042/047
E194/E435

24,3900

AUTHOR: Yakovlev, S.A.

TITLE: The transparency of white sapphire in the ultra-violet part of the spectrum as function of temperature

PERIODICAL: Pribory i tekhnika eksperimenta, no.2, 1962, 175

TEXT: Because of its transparency over a wide range of the spectrum, white sapphire is becoming widely used to make windows for various light sources. It was noticed that on heating these windows, there was a fall in their transparency near to the short-wave boundary of transmission which was recovered on cooling. Measurements of the transmission of sapphire laminae as function of temperature were made on a vacuum monochromator in the light of a hydrogen lamp with a window of lithium fluoride. Fig.2 shows percentage transmission as function of wavelength in Ångstrom units for various temperatures and Fig.3 shows the transmission boundary in A, at the 5% level as function of temperature. The facts presented should be allowed for in designing instruments with sapphire windows that are liable to become hot. There are 3 figures.

~~Card 1/2~~

State Optical Inst

Submitted June 1961

39686
S/051/62/013/001/004/019
E039/E420

24.3100

AUTHORS: Kir'yanova, L.A., Pivovarov, V.M., Yakovlev, S.A.

TITLE: The excitation of combination scattering in the orange and red regions of the spectrum

PERIODICAL: Optika i spektroskopiya, v.13, no.1, 1962, 79-82

TEXT: Description is given of a powerful low voltage helium lamp, intended for the excitation of combination scattering spectra in the orange and red regions of the spectrum. The discharge tube is 40 mm in diameter and constructed from 3C-5K glass, working length 120 mm, with oxide coated electrodes and designed for a working current of 8 to 10 A. Near each electrode is an auxiliary trigger electrode. The intensity of the He 5875 Å line is shown to decrease steadily as the helium pressure is increased, the best conditions being obtained at about 2 mm, with a working voltage of 150 to 170 V. The intensities of the 5875, 6678, 7065 and 7281 Å lines all increase linearly with current over the range 2 to 9 A. A rough spectrum of the spectral energy distribution is given: taking the 5875 Å lines as 100, the 6678, 7065 and 7281 Å lines are 14.1, 8.1 and 2.6 respectively.

Card 1/2

S/051/62/013/001/004/019
E039/E420

The excitation of combination ...

Using photoelectric and photographic recording the spectrum of o-nitroaniline in acetone (C = 1.3 mole/litre) is obtained and compared with the data of J. Behringer for o-nitroaniline in CCl_4 solution. No agreement is obtained over the range observed, i.e. $\sim$ 350 to 1600 cm^{-1}. The spectrum of CCl_4 excited by the He lines 5875, 6678 and 7065 Å is also examined (only anti-Stokes region). There are 5 figures and 2 tables.

SUBMITTED: May 19, 1961

Card 2/2

L 9856-63 BDS

ACCESSION NR: AP3000590 S/0051/63/014/005/0716/0720

47

AUTHOR: Yakovlevv, S. A.

TITLE: Xenon resonance tube 10

SOURCE: Optika i spektroskopiya, v. 14, no. 5, 1963, 716-720

TOPIC TAGS: discharge tubes, xenon

ABSTRACT: A xenon discharge tube designed to emit the 1295 and 1470 Angstrom resonance lines has been developed. The discharge conditions are chosen so as to obtain the maximum possible intensity of the 1470 Angstrom line. The tube has a fluorite window attached by means of epoxy cement. Curves showing the variation in intensity of the 1244.8, 1295, 1470 and 2476 Angstrom lines as a function of the discharge current are given. The principal internal components are an oxide-coated cathode, an anode, a shielding cylinder and a "discharge capillary" (a molybdenum wire helix with an inside diameter of 4 mm). The results of internal absorption studies are summarized. "The author thanks S. A. Kulikov and T. N. Kochurov for assistance in carrying out the work."

Card 1/2

L 9856-63
ACCESSION NR: AP3000590

Orig. art. has 1 equation and 6 figures.

ASSOCIATION: none

SUBMITTED: 26Jul62 DATE ACQ: 12Jun63 ENCL: 00

SUB CODE: PH NR REF SOV: 002 OTHER: 005

nh/ja

Card 2/2

L 11263-63 EPR/EWP(j)/EPF(c)/EWT(m)/BDS AFFTC/ASD Ps-4/Pc-4/Pr-4 RM/WW

ACCESSION NR: AP3004576 S/0032/63/029/008/1007/1007

AUTHOR: Fiveyskaya, A. K.; Yakovlev, S. A.

TITLE: A method for bonding optical crystal windows to lamps and vessels. [Report presented at a conference on spectroscopy held in Gor'kiy from 5 to 12 July 1961]

SOURCE: Zavodskaya laboratoriya, v. 29, no. 8, 1963, 1007

TOPIC TAGS: spectroscopy, bonding, vacuum-tight bonding, gasket, fluoroplast-3, polychlorotrifluoroethylene, Kel-F, fluorite, lithium fluoride, ultraviolet light source, OK-50, OK-50 heat-resistant adhesive

ABSTRACT: A method has been proposed for the vacuum-tight bonding of a window of crystalline material to a glass vessel for service in the -195 to +150C temperature range. A flat ring-type gasket of fluoroplast-3 [polychlorotrifluoroethylene], pretreated with a solution of sodium naphthalene complex in tetrahydrofuran, was bonded with OK-50 heat-resistant adhesive between the window and the vessel to compensate for the difference in thermal expansion coefficient. After bonding, the part is held at 60—150C for 3 hr. The method has been tested with fluorite and lithium fluoride windows in vacuum ultraviolet light sources.

Card 1/2

L 8214-66 EWT(l)/EWT(m)/EWP(t)/EWP(b) IJP(c) JD
ACC NR: AP5013862 SOURCE CODE: UR/0368/65/002/004/0363/0364

AUTHOR: Yakovlev, S. A.; Volkova, G. A.
44,55 44,55

ORG: none
21,44,55

TITLE: Use of the thermoluminescence method to measure the radiation intensity from xenon resonance tubes

SOURCE: Zhurnal prikladnoy spektroskopii, v. 2, no. 4, 1965, 363-364

TOPIC TAGS: line intensity, UV radiation, xenon, thermoluminescence

ABSTRACT: The authors use the thermoluminescence method for measuring radiation intensity from xenon tubes which emit monochromatic radiation on the 1470 and 1295 Å resonance lines. A manganese-activated calcium sulfate thermophosphor was used as the radiation dosimeter. The equipment and procedure are briefly described. The two types of tubes studied are described in a previous work by one of the authors (S. A. Yakovlev, *Opt. i spektr.*, 14, 716, 1963). The radiation intensity (in quanta/sec) for tube type I was $8 \cdot 10^{15}$ at 1470 Å and $5 \cdot 10^{14}$ at 1295 Å. For tube type II, the intensity was $5 \cdot 10^{16}$ at 1470 Å and $6 \cdot 10^{14}$ at 1295 Å. The measurement error was 40-50%. In conclusion, the authors are grateful to V. A. Arkhangel'skaya and T. K. Razumova for valuable assistance and consultation in the course of this work. Orig. art. has: 1 table.

SUB CODE: OP/ SUBM DATE: 24Nov64/ ORIG REF: 003/ OTH REF: 001

UDC: 535.231.1 : 621.327.52 : 535.377

Card 1/1

YAKOVLEV, S., Vet.
Vet. Administration, Main Administration of Animals Husbandry
Ministry of Agriculture, USSR
"In the Ministry of Agriculture, USSR."
SO: Vet. 27 (7) 1950, p. 59

YAKOVLEV, S. F.

YAKOVLEV, S. A, Vet.
Vet. Admin., Main Admin. of Animal Husbandry, Ministry of Agric., USSR
"Surgical method of the fight against coneurosis of sheep."
SO: Veterinariya 27(11), p, 47 1950

YAKOVLEV, S.A.

POLYKOVSKIY, M.D., And YAKOVLEV, S.A., Vet.
Vet. Admin., Main admin. of Animal Husbandry, Ministry of Agric., USSR.
"Enzootic ataxia of lambs."
SO: Veterinariia 29(9), 1952, p. 31

VELICHKIN, P. A., professor; YAKOVLEV, S.A.

Toxicity of phenothiazine in horses. Veterinariia 30 no.8:46-49 Ag '53. (MLRA 6:8)

1. Starshiy veterinarnyy vrach Vetupravleniya Glavzhivupra Ministerstva sel'skogo khozyaystva i zagotovok SSSR (for Yakovlev)

FD 314

YAKOVLEV, S. A.
USSR/Medicine - Veterinary

Card 1/1

Author : Yakovlev, S. A., Senior Veterinary Physician

Title : On immunoprophylaxis against distemper

Periodical : Veterinariya, 6, 28-30, June 1954

Abstract : The veterinary section of the scientific-technical council of the Ministry of Agriculture USSR, has recommended the polyvalent embryo-formol-aluminum hydroxide vaccine and hyperimmune serum of Ye. S. Cherkasskiy in the treatment and prophylaxis of distemper. The vaccine was tested in different parts of the USSR, under various climatic conditions; it produced dependable immunity in adult animals, lasting at least 6 months. Distemper was successfully treated by injection of a double prophylactic dose, 2-3 times. Cherkasskiy originally obtained the vaccine and serum by inoculating the developing chicken embryo with the virus taken from puppies and then inoculating the puppies with the virus taken from the developing chicken embryo. By means of this cross inoculation it is possible to change the nature of virus and to attenuate it to the extent that all the virulent properties of the virus become completely lost. This vaccine has been manufactured since 1950 by the All-Union Scientific-Research Institute of Commercial Hunting IVNIO.

Institution : Veterinary Administration, Main Administration of Animal Husbandry, Ministry of Agriculture USSR

Submitted :

YAKOVLEV, S.A., starshiy veterinarnyy vrach.

Myxomatosis. Veterinariia 33 no.12:36-38 D '56. (MLRA 9:12)

1. Glavnoye veterinarnoye upravleniye Ministerstva sel'skogo khozyaystva SSSR.
(Rabbits--Diseases) (Tumors)

YAKOVLEV, S.A., veterinarnyy vrach.

Winter lambing in Fergana Province. Nauka i pered.op.v sel'khoz. 7 no.7:75 Jl '57. (MLRA 10:8)
(Fergana--Lambs)

YAKOVLEV, S.A.

More attention to veterinary services on waterfowl farms. (MIRA 11:9)
Veterinariia 35 no.9:15-18 S '58.

1. Starshiy vetvrach Glavnogo upravleniya veterinarii Ministerstva sel'skogo khozyaystva SSSR.
(Ducks--Diseases and pests)

PANASYUK, D.I., kand. veterinarnykh nauk; YAKOVLEV, S.A.

Phenothiazine is a highly effective drug for the control of dictyocaulosis and other strongylosis infections in sheep. Veterinariia 36 no.9:27-29 S '59. (MIRA 12:12)

1.Vsesoyuznyy institut gel'mintologii im. akademika K.I. Skryabina (for Panasyuk). 2.Starshiy veterinarnyy vrach Gosudarstvennoy inspektsii po veterinarii Ministerstva sel'skogo khozyaystva SSSR (for Yakovlev). (Phenothiazine) (Sheep--Diseases and pests)

YAKOVLEV, S.A.

Achievements of helminthology in the service of production. Veterinariia 42 no.8:52-53 Ag '65. (MIRA 18:11)

1. Glavnyy spetsialist po boleznyam ptits Glavnogo upravleniya veterinarii Ministerstva sel'skogo khozyaystva SSSR.

YAKOVLEV, S.A., inzh.

Use of precast reinforced concrete in bridge building. Transp. strcit. 15 no.4:9-11 Ap '65. (MIRA 18:6)

YAKOVLEV, S.D., assistent, kand.tekhn.nauk

Movement of silt in pipes with low and high saturation. Trudy MIIGESKH 8:150-170 '59. (MIRA 13:9)
(Silt)

YAKOVLEV, S.D., kand.tekhn.nauk

Velocity of the movement of sediments in river-fed intake pipes.
Izv. TSKhA no.1:148-158 '61. (MIRA 14:3)
(Sedimentation and deposition)
(Hydraulics)

YAKOVLEV, S.D., kand. tekhn. nauk

Hydraulic calculation of water pipes taking into account the transportation of suspensions. Vod. i san. tekh. no.1:5-9 Ja '66. (MIRA 19:1)

YAKOVLEV, S.G.

Volunteer economists in the service of industry. Metallurg 10 no.8:5-6 Ag '65. (MIRA 18:8)

1. Predsedatel' obshchestvennogo Soveta ekonomicheskogo analiza Cherepovetskogo metallurgicheskogo zavoda.

YELYUTIN, V.P.; MOZZHUKHIN, Ye.I.; YAKOVLEV, S.G.

Investigating the self-diffusion of cobalt in specimens of cobalt and Co + Al_2O_3 compositions prepared by powder metallurgy methods. Fiz. met. i metalloved. 19 no.3:389-396 Mr '65. (MIRA 18:4)

1. Moskovskiy institut stali i splavov.

AUTHOR: Yelyutin, V. P.; Mozzhukhin, Ye. I.; Yakovlev, S. G.

TITLE: Self-diffusion of cobalt in specimens of cobalt and a Co + Al_2O_3 composition prepared by powder metallurgy methods

SOURCE: Fizika metallov i metallovedeniye, v. 19, no. 3, 1965, 389-396

TOPIC TAGS: cobalt, self diffusion, alumina, powder metallurgy

ABSTRACT: The effect of dispersed inclusions of Al_2O_3 on the self-diffusion of cobalt was studied. Hot-worked specimens were prepared from pressed blanks sintered at 1475°K in hydrogen for 2 hrs. It is shown that both in cobalt and in Co-Al_2O_3 compositions prepared by powder metallurgy methods, diffusion processes occur at higher rates than in dense cobalt prepared by the usual metallurgical methods. The difference between the coefficients of self-diffusion in specimens and dense cobalt decreases with temperature. The temperature dependence of the effective coefficient of self-diffusion of cobalt in powder metallurgy specimens changes at 1175°K which is the result of diffusion processes along grain boundaries

Card 1/2

L 53689-65

ACCESSION NR: AP5009784

of sintered specimens at low temperatures. Dispersed inclusions of aluminum increase the coefficients of self-diffusion. The formation of inclusion aggregates

SUBMITTED:

Card 2/2

YAKOVLEV, S.I.

VOLYNSKIY, Z.M., professor; ISAKOV, I.I.; YAKOVLEV, S.I.; KEYZER, S.A.

Characteristics of arterial pressure in inhabitants of Leningrad during the postwar years and normal blood pressure. Terap. arkh. 26 no.3:3-9 My-Je '54. (MLRA 7:9)

1. Iz Voyenno-morskoy meditsinskoy akademii
(BLOOD PRESSURE, statistics,
Russia)

YAKOVLEV, S.I., doktor med.nauk; DOROFEYEV, G.I., kand.med.nauk; ONIKIYENKO, B.A.; POLUNOVA, Ye.N.

Clinical aspects and remote results of the treatment of acute poisoning with methyl alcohol. Voen.-med.zhur. no.3:40-44 Mr '61. (MIRA 14:7)

(METHANOL--TOXICOLOGY)

S/194/61/000/012/080/097
D273/D301

AUTHORS: Gurevich, M. D., Klynkachev, V. A., Sobakin, M. A. and Yakovlev, S. I.

TITLE: Ultrasonic diagnostic apparatus for the study of soft tissues УЗД-4 (UZD-4)

PERIODICAL: Referativnyy zhurnal, Avtomatika i radioelektronika, no. 12, 1961, 22, abstract 12E122. ("Novosti med. tekhn." 1960, no. 6, 3-17)

TEXT: The possibilities of ultrasonic diagnostics are examined. The diagnostic apparatus UZD-4 designed in the ВНИИМИиО (VNIIMIiO) is described. It is noted that one of the most important parameters of the instrument - the maximum depth action - is almost entirely determined by the ultrasonic damping coefficient in tissues and to a lesser degree depends on the power of the transmitter, the sensitivity of the receiver and other factors. The UZD-4 works at frequencies of 2.5; 5; 10 and 15 Mc/s, a launching frequency of 1000 c/s, and a pulse length of 3 microseconds. The depth of sound-

Card 1/2

Ultrasonic diagnostic apparatus ...

ing at 2.5 Mc/s reaches 90 mm and the destructive mode forms at a depth of 3.5 mm and at an azimuth of 5 mm. For 15 Mc/s, these parameters are respectively equal to 20, 1.2 and 5 mm. The power consumption is 1.4 KVA. The instrument has 2 ЭЛТ (ELT): The first tube with a linear afterglow and brightness modulation is designed to obtain a two-dimensional representation of organ sections along the scanning beam; the second tube with an oscillographic reamer is used with a fixed position indicator. A detailed description is given of the generator circuit of the UZD-4 and constructional details of the instrument. A sketch is given of the scanning position indicator consisting of a hermetically sealed body with a tube of determined length, in which a piezoelectric converter has a back and forth movement. As indicator of the position of the piezoelement, a linear potentiometer is used, whose potential is amplified and applied to the deflection system of the ELT. 5 figures. 1 table. / Abstractor's note: Complete translation. /

Card 2/2

YAKOVLEV, Sergey Il'ich

Academic degree of Doctor of Medical Sciences, based on his defense, 13 July 1955, in the Council of the Military Naval Medical Academy, of his dissertation entitled: "The role and significance of the nervous system and the vitamins of the B-complex group in erythroieses."

Academic degree and/or title: Doctor of Sciences

SO: Decisions of VAK, List no. 24, 26 Nov 55, Byulleten' MVO SSSR, No. 20, Oct 57, Moscow, pp 22-24, Uncl. JPRS/NY-471

YAKOVLEV, S.K.

The work of a veterinary section. Veterinariia 33 no.10:24-29 O '56. (MLRA 9:10)

1. Zaveduyushchiy Yutskim veterinarnym uchastkom Pyatigorskogo rayona, Stavropol'skogo kraya.
(Pyatigorsk--Veterinary medicine)

YAKOVLEV, S. [M.]

"Baltika," Radio, No.1, pp 22-24, 1953

Discusses modernization in 1952 of the Baltika 2nd class superhet receiver produced by VEF plant. Receiver has following bands: long wave 150-415 kc; medium wave, 520-1,600 kc; and 2 sw, 3.95-9.2 Mc and 9.0-12.1 Mc. The rated output power is at least 1.5 w. Sensitivity is at least 200 v on long and medium waves and 300 uv on sw. Selectivity is at least 26 db for 10 kc detuning. Discusses changes in set, which were primarily in the af section. 253T73

YAKOVLEV, Sergey Malakhiyevich; VALIKOVA, K., red.; FILIPPENKOVA, M., tekhn.red.

[Gleb Vasil'evich Alekhnovich, a pioneer of Russian aviation; his life and work] Pioner russkoi aviatsii Gleb Vasil'evich Alekhnovich; ocherk zhizni i deiatel'nosti. Smolensk, Smolenskoe knizhnoe izd-vo, 1960. 40 p. (MIRA 13:10)
(Alekhnovich, Gleb Vasil'evich, 1886-1918)

YAKOVLEV, S.M.

The quality of technical posters concerning peat. Torf.prom. vol. 30 no.11: 28-29 N-D '53. (MLRA 6:11)

(Posters) (Peat industry)

YAKOVLEV, S. M.

BYAKOV, P.T., inzhener; YAKOVLEV, S.M.

Machine for grading work in hydraulic peat fields. Torf.prom. 31 no.5:12-14 '54. (MLRA 7:8)

1. Chernoramenskoye torfopredpriyatiye (for Byakov) 2. Vsesoyuznyy nauchno-issledovatel'skiy institut torfyanoy promyshlennosti (for Yakovlev).
(Peat machinery)

YAKOVLEV, Sergey M.

LITVYAKOV, Ivan Ignat'yevich; YAKOVLEV, Sergey Malakhiyevich; KHOROSHAVIN, N.I., redaktor; LARIONOV, G.Ye., tekhnicheskiy redaktor.

[Winning cut peat with a string of machines] Dobycha frezernogo torfa ukrupnennymi kolonnami mashin; opyt raboty Orichevskogo torfopredpriiatiia. Moskva, Gos.energ.izd-vo, 1955. 29 p.(MLRA 8:11)
(Peat)

YAKOVLEV, S.M.

OREM, Leonid Nikolayevich; YAKOVLEV, Sergey Malakhiyevich; DOMASHIN, V.A. redaktor; ZABRODINA, A.A., tekhnicheskiy redaktor.

[Innovators in electric engineering in the peat industry] Elektriki-novatory torfianoi promyshlennosti. Pod red. V.A. Domashina. Moskva, Gos. energ. izd-vo, 1955. 85 p. (MLRA 8:8)
(Electric engineering) (Peat industry)

YAKOVLEV, S.M., inzh.

Double-jawed grab for loading milled peat. Elek.sta. 28 no.10:82 '57. (MIRA 10:11)

(Peat machinery)

YAKOVLEV, S. M.

DOMASHIN, Valentin Aleksandrovich; OPEM, Leonid Nikolayevich; YAKOVLEV, Sergey Malakhovich; KOLOTUSHKIN, V.I., red.; CHERNOV, V.S., tekhn. red.

[Electricians as innovators in the peat industry] Elektriki-novatory torfianoi promyshlennosti. Moskva, Gos. energ. izd-vo. Pt.2. 1957. 93 p. (MIRA 11:7)

(Peat machinery)

YAKOVLEV, S.M.

Hammer breaker used in processing raw peat. Biul.tekh.-ekon.inform. no.2:8-9 '58. (MIRA 11:4)
(Peat machinery)

YAKOVLEV, S.M.

The UMS machine used for mechanizing open-air drying of peat bricks. Biul. tekh.-ekon. inform. no.3:12-13 '58. (MIRA 11:6)
(Peat machinery)

YAKOVLEV, S.M.

The VMF-6 raking machine. Biul.tekh.-ekon.inform. no.12:10-11 '58. (MIRA 11:12)

(Peat machinery)

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(Peat machinery)